

ATTACHMENT A

Claims 1 - 17: (Cancelled)

18. (New) Lewis base adducts comprising a compound of formula $MgCl_n(OR)_{2-n}$, and an aprotic Lewis base (LB) that are in molar ratios to each other defined by formula $MgCl_n(OR)_{2-n}LB_p$ in which n is from 0.1 to 1.9, p is higher than 0.4, and R is a C1-C15 hydrocarbon group.

19. (New) The adducts according to claim 18 in which the aprotic Lewis base (LB) is at least one ester or ether.

20. (New) The adducts according to claim 19 in which the ether is at least one cyclic ether comprising 3-5 carbon atoms.

21. (New) The adducts according to claim 20 in which the ether is tetrahydrofuran.

22. (New) The adducts according to claim 18 in which p is higher than 0.45.

23. (New) The adducts according to claim 18 in which n ranges from 0.4 to 1.6.

24. (New) A process for preparing Lewis base adducts comprising a compound of formula $MgCl_n(OR)_{2-n}$, and an aprotic Lewis base (LB) that are in molar ratios to each other defined by formula $MgCl_n(OR)_{2-n}LB_p$ in which n is from 0.1 to 1.9, p is higher than 0.4, and R is a C1-C15 hydrocarbon group comprising

- contacting organometallic compounds of formula $\text{Cl}_m\text{MgR}_{2-m}$, where m is from 0 to 2, and R is a C₁-C₁₅ hydrocarbon group; with

- an OR source where R is a C₁-C₁₅ hydrocarbon group in presence of an aprotic Lewis base (LB).

25. (New) The process according to claim 24 in which the OR source is selected from ROH alcohols and orthosilicic acid esters where R is a C₁-C₁₅ hydrocarbon group.

26. (New) The process according to claim 24 in which $\text{Cl}_m\text{MgR}_{2-m}$ is formed, and further exchange with the OR source takes place in a single step.

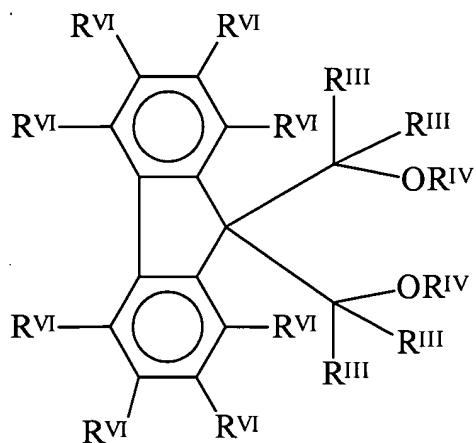
27. (New) A process for preparing Lewis base adducts comprising a compound of formula $\text{MgCl}_n(\text{OR})_{2-n}$, and an aprotic Lewis base (LB) that are in molar ratios to each other defined by formula $\text{MgCl}_n(\text{OR})_{2-n}\text{LB}_p$ in which n is from 0.1 to 1.9, p is higher than 0.4, and R is a C₁-C₁₅ hydrocarbon group comprising reacting mixtures of MgCl₂ and MgOR₂ wherein R is a C₁-C₁₅ hydrocarbon group in presence of the aprotic Lewis base (LB).

28. (New) A catalyst component obtained by contacting at least one Lewis base adduct comprising a compound of formula $\text{MgCl}_n(\text{OR})_{2-n}$, and an aprotic Lewis base (LB) that are in molar ratios to each other defined by formula $\text{MgCl}_n(\text{OR})_{2-n}\text{LB}_p$ in which n is from 0.1 to 1.9, p is higher than 0.4, and R is a C₁-C₁₅ hydrocarbon group with at least one compound comprising at least one transition metal belonging to one of the groups 4 to 6 of the Periodic Table of Elements (new notation).

29. (New) The catalyst component according to claim 28 in which the compound comprising at least one transition metal is a transition metal compound selected from at least one titanium compound of formula $Ti(OR'')_nX_{y-n}$ in which n is between 0 and y; y is a valence of titanium; X is halogen; and R'' is an alkyl radical comprising 1-10 carbon atoms or COR'' in which R'' is a C_{1-10} hydrocarbon group.

30. (New) The catalyst component according to claim 28 further comprising at least one electron donor selected from at least one ester, ether, amine, ketone, or mixture thereof.

31. (New) The catalyst component according to claim 30 in which the electron donor is selected from 1,3-diethers of formula (III)



(III)

where

R^{VI} are equal or different, and are hydrogen, halogens, linear or branched C_1-C_{20} alkyl radicals, C_3-C_{20} cycloalkyl

radicals, C₆-C₂₀ aryl radicals, C₇-C₂₀ alkylaryl radicals and C₇-C₂₀ aralkyl radicals, optionally comprising at least one heteroatom selected from the group consisting of N, O, S, P, Si and halogen as a substitute for carbon, hydrogen, or both;

R^{III} are equal or different, and are hydrogen or C₁-C₁₈ hydrocarbons

R^{IV} are equal or different, and are C₁-C₁₈ hydrocarbons.

32. (New) The catalyst component according to claim 31 in which R^{VI} are equal or different, and are Cl, F, or combinations thereof.

33. (New) The catalyst component according to claim 31 in which R^{VII} comprise Cl, F, or combinations thereof as the substitutes for carbon or hydrogen.

34. (New) A catalyst system for polymerizing alpha-olefins of formula CH₂=CHR', wherein R' is hydrogen or a hydrocarbon radical comprising 1-12 carbon atoms, obtained by contacting a catalyst component obtained by contacting at least one Lewis base adduct comprising a compound of formula MgCl_n(OR)_{2-n}, and an aprotic Lewis base (LB) that are in molar ratios to each other defined by formula MgCl_n(OR)_{2-n}LB_p in which n is from 0.1 to 1.9, p is higher than 0.4, and R is a C₁-C₁₅ hydrocarbon group with at least one compound comprising at least one transition metal belonging to one of the groups 4 to 6 of the Periodic Table of Elements (new notation) with one or more organoaluminum compounds.

35. (New) The catalyst system according to claim 34 further comprising an external electron donor compound.

36. (New) A process for polymerizing alpha-olefins carried out in presence of a catalyst system for polymerizing alpha-olefins of formula $\text{CH}_2=\text{CHR}'$, wherein R' is hydrogen or a hydrocarbon radical comprising 1-12 carbon atoms, obtained by contacting a catalyst component obtained by contacting at least one Lewis base adduct comprising a compound of formula $\text{MgCl}_n(\text{OR})_{2-n}$, and an aprotic Lewis base (LB) that are in molar ratios to each other defined by formula $\text{MgCl}_n(\text{OR})_{2-n}\text{LB}_p$ in which n is from 0.1 to 1.9, p is higher than 0.4, and R is a C1-C15 hydrocarbon group with at least one compound comprising at least one transition metal belonging to one of the groups 4 to 6 of the Periodic Table of Elements (new notation) with one or more organoaluminum compounds.